

B/S

**JP02024633**  
**ELECTROPHORETIC DISPLAY DEVICE**  
**KINSEKI LTD**

**Inventor(s): ; HANJI MOTOYASU ; OSHIMA TATSUYA**  
**Application No. 63175599, Filed 19880713, Published 19900126**

**Abstract:** PURPOSE: To substantially prevent settling of electrophoretic particles even after long-term use or resting by using a porous org. material for the nuclei of the electrophoretic particles and applying the coating of an inorg. material around the nuclei and subjecting the particles to sp. gr. adjustment.

CONSTITUTION: Electrodes 2 are formed on the surface of a transparent substrate 1 so as to comply with the patterns displayed on the surface of the substrate. Dispersion media 3 and the electrophoretic particles 3 are hermetically sealed between the substrates 1. The display is changed by changing the voltage impressed between the electrodes 2. The nuclei 10 of the particles 4 are the org. material and the internally porous so that many air bubbles 11 exist therein. The coating layer 12 consisting of the inorg. material is formed around the nuclei 10. Buoyancy is increased and the particles 4 have the sp. gr. near the sp. gr. of the dispersion media 3 by using the porous org. material for the nuclei 10 of the particles 4. The settling of the particles 4 is then obviated and the good display screen is obtd. over a long period of time. The easy tendency to electrification and the good electrical characteristics are obtd. by using the inorg. material for the layer 12.

COPYRIGHT: (C)1990,JPO&Japio

**Int'l Class:** G02F001167; G09F00937

**MicroPatent Reference Number:** 000144387

COPYRIGHT: (C)JPO